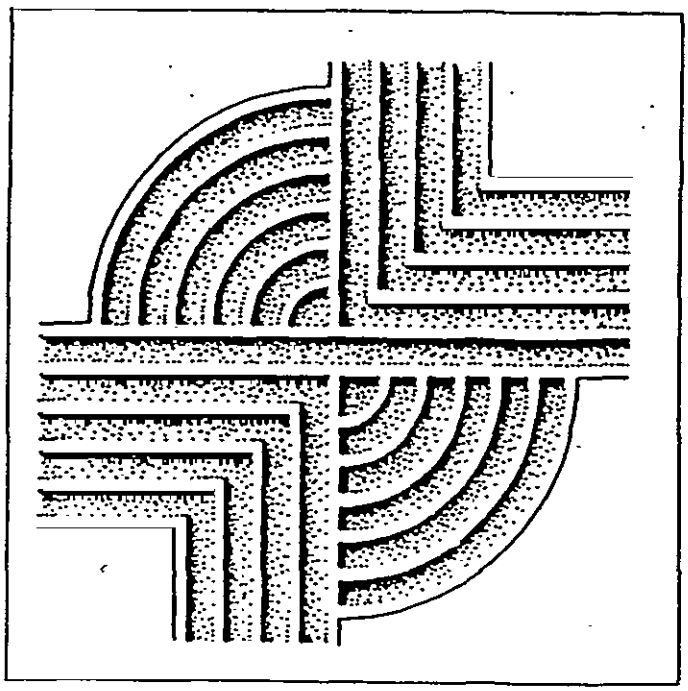
ARCHAEOLOGICAL SURVEY OF THE PROPOSED DUKE POWER SUBAQUEOUS LINE, LAKE HARTWELL, ANDERSON COUNTY, SOUTH CAROLINA



RESEARCH CONTRIBUTION 59

ARCHAEOLOGICAL SURVEY OF THE PROPOSED DUKE POWER SUBAQUEOUS LINE, LAKE HARTWELL, ANDERSON COUNTY, SOUTH CAROLINA

Prepared For:
Mr. Daryl Rosenberger
Mar-Tec
5889 St. Celilia Road
Jacksonville, Florida 32207

Prepared By:

Michael Trinkley

Chicora Research Contribution 59

Chicora Foundation, Inc.
P.O. Box 8664
861 Arbutus Drive
Columbia, South Carolina 29202
803/787-6910

March 25, 1991

Introduction

This investigation of the proposed Duke Power subaqueous line was conducted by Dr. Michael Trinkley of Chicora Foundation, Inc. for the engineering firm of Mar-Tec in Jacksonville, Florida. The study area is situated on the south side of S-29 in Anderson County as it crosses Lake Hartwell (Figure 1).

The project coordinator, Mr. Daryl Rosenberger, indicated that ground disturbing activities would be confined to an area about 50 to 100 feet on the east and west sides of Lake Hartwell. Within the project area on the west side of Lake Hartwell is a dirt road, while the east side is characterized by hardwood vegetation and steep slopes. There is an existing aerial line in the project area which will be replaced by the proposed new subaqueous line. The proposed construction will involve the removal of several existing poles and the excavation necessary to bury the new line at the crossing.

The proposed project will require an Army Corps 404 permit and is subject to the review of the South Carolina State Historic Preservation Office (SHPO). Chicora was verbally requested to submit a budgetary proposal for a survey of the 404 permit area by Mr. Daryl Rosenberger. An agreement for the study was approved by Mar-Tec on February 15, 1991.

This study is intended to provide a synopsis of the archaeological survey of the Lake Hartwell subaqueous line crossing. The project included one-half person days of research, conducted by Ms. Debi Hacker of secondary sources, as well as the statewide archaeological site files held by the South Carolina Institute of Archaeology and Anthropology. The field investigations were conducted on March 15, 1991 by Dr. Michael Trinkley. This field work involved 8 person hours. Laboratory and report production were conducted at Chicora's laboratories in Columbia, South Carolina on March 22, 1991.

No archaeological or historical sites were identified in this study and no collections were made. Therefore, no curation arrangements have been made. The field documentation will be stored by Chicora Foundation, with archival copies (on pH neutral, alkaline buffered paper) forwarded to the S.C. Institute of Archaeology and Anthropology for permanent curation.

Effective Environment

Anderson County is situated in the northwestern part of South Carolina and incorporates an area of about 473,000 acres. The

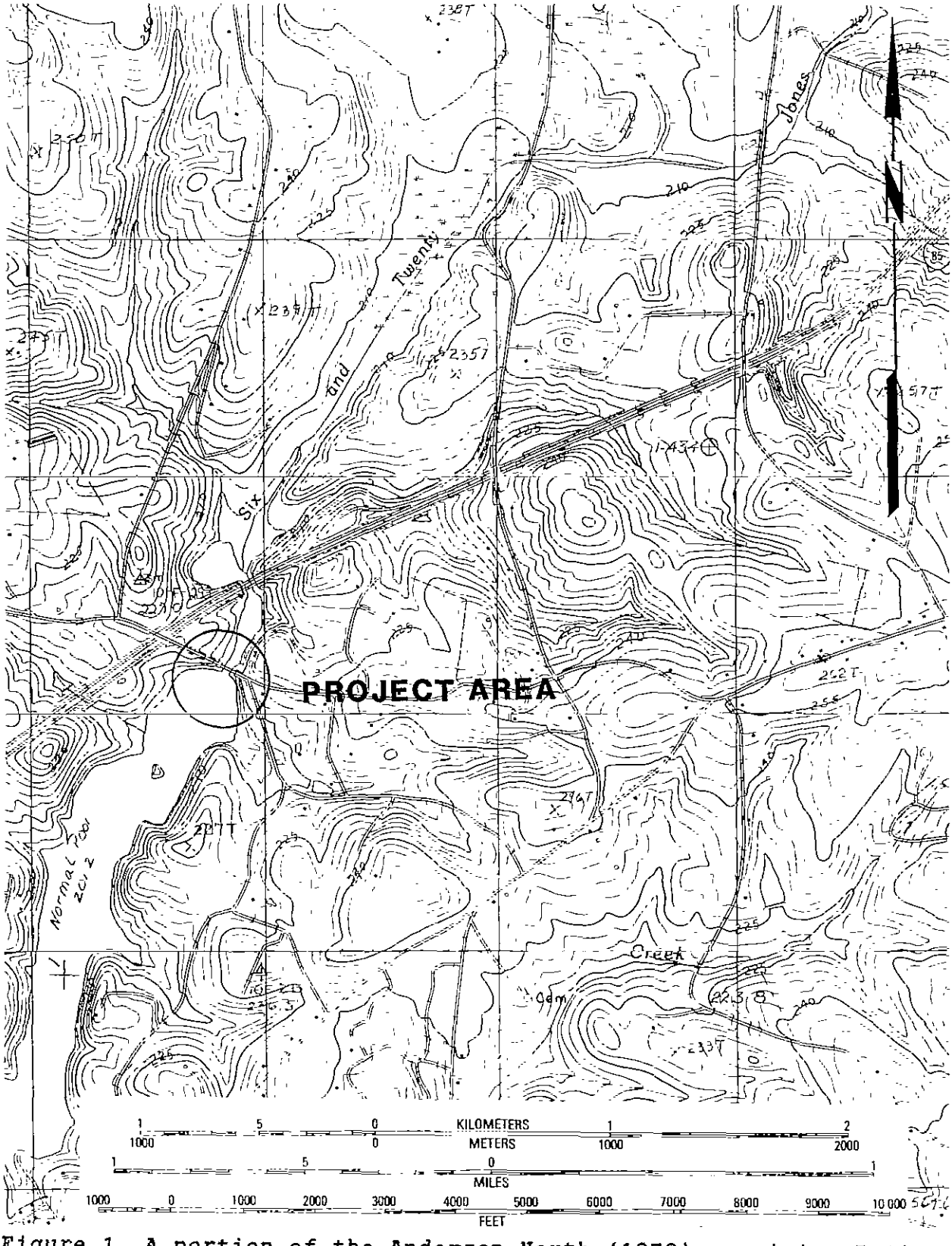


Figure 1. A portion of the Anderson North (1973) provision 7.5' USGS topographic map showing the project area.

County is in the Piedmont Plateau and elevations range from about 450 feet above mean sea level (MSL) on the Savannah River to over 1000 feet MSL in the central portion of the County. Most of the acreage is gently rolling, although areas near streams and creeks (such as in the survey area) are moderately steep to steep. Floodplains tend to be narrow and are frequently flooded (Fenneman 1938; Herren 1979).

One of the more characteristic aspects of the Piedmont is its dendritic drainage system -- numerous small creeks, streams, and rivers dissecting the Piedmont peneplain. In the survey area Six and Twenty Creek has been flooded by the creation of Lake Hartwell in the early 1960s. Although the area north of S-29 continues to be called a creek, it represents part of the Lake Hartwell flood pool.

A second, equally characteristic, feature about the Piedmont is the nature of the soils. Lowery (1934) found the area in the vicinity of Six and Twenty Creek evidencing severe sheet erosion with occasional gullies. The more westerly portions of Anderson County were classified as either destroyed by erosion or as having severe sheet erosion and frequent gullies. Trimble (1974) reveals that the bulk of Anderson County, including the survey area, has lost from 0.9 to 1.1 foot of soil to erosion. Being on the edge of the major antebellum cotton plantation area, the survey area was very heavily impacted by postbellum cotton and general agricultural practices.

The soils on the western side of the project are classified as Hiwassee clay loams found on slopes ranging from 6 to 10%. On the east side of Lake Hartwell the survey tract contains Madison sandy loams with 15 to 25% slopes (Herren 1979:Map 23). The Hiwassee soils are typical of sloping uplands adjacent to streams and rivers. In the project area the surface layer (Ap horizon) is a dark red clay loam with abundant decomposing rock to the depth of about 0.6 foot. It overlies a dark red clay which shovel tests reveal to a depth of at least 1.0 foot. The Madison soils are also found adjacent to major drainages. The surface layer consists of 0.1 foot of tan clay overlying a red clay loam to a depth of 1.0 foot. Decomposing saprolite rock is dense throughout the profile (see also Herren 1979).

The project area provided clear evidence, through the very thin A horizons, dense quantities of decomposing rock in the upper soil levels, and evidence of active erosion and gullying on the west side of Lake Hartwell, of the history of neglect and mismanagement typical of much of the Southern Piedmont. Only today is a new A horizon gradually developing to replace that lost to the erosive agricultural practices of the late nineteenth and early twentieth centuries.

Upland vegetation throughout the Piedmont is typically considered oak-pine, transitional to oak-hickory at the higher

elevations (Braun 1950). In the study area there is a mixed hardwood and pine forest, with evidence of vegetative changes brought about by logging activities. About 44% of the County is today in agricultural production, with 45% in woodlands. The remaining acreage is urban.

Additional information on the environment of Anderson County can be obtained from Goodyear et al. (1979).

Background Research

Several previous published archaeological studies are available for the Anderson County area of the Piedmont to provide background, including Goodyear et al. (1979) for the Laurens-Anderson highway connector route, Anderson and Joseph (1988) for the Richard B. Russell Reservoir synthesis, and Kelly and Neitzel (1961) for the Chauga site, now under Lake Hartwell in adjacent Oconee County. Trinkley (1990) provides a synthesis of Woodland Period archaeology in South Carolina.

Other than these major projects surprisingly little published archaeology has been conducted in this area. The South Carolina Institute of Archaeology and Anthropology site files reveal only a relatively small number of primarily Archaic Period prehistoric sites in the inter-riverine areas.

Based on these previous studies and the presented data on the soils typical of the survey area, the project area was suspected to have a relatively low probability of prehistoric archaeological remains. The soils are heavily eroded and the slopes on the east side of the project are very steeply sloping. The historic potential of the project area is somewhat more difficult to gauge, but the topographic situation and severe erosion suggested that it would be unlikely to find these types of sites as well.

Given the small size of the project area as defined by Mar-Tec, Chicora concentrated on a general review of secondary sources with the use of relatively few primary documents, rather than conduct an intensive historical evaluation of the tract. If either the basic review or the field investigations revealed the presence of significant historical sites in the project area then a more intensive study would be conducted.

Anderson County is part of the Cherokee land sessions, deeded to South Carolina in 1777 (Royce 1975:21). Migration into the area began somewhat earlier, but this "treaty" provided the opportunity for extensive settlement in this part of the South Carolina "back county." By 1790 the Cherokee lands, covering about 8% of the State, had more than 10% of its free population. In 1789 the present counties of Anderson, Pickens, and Oconee became Pendleton District, with the courthouse established in Pendleton. The 1820 Mills' Atlas fails to show any settlement in the survey area.

In 1826 Anderson County was created out of Pendleton District and the courthouse was established in the central portion of the new county on the main road. Like many other Piedmont counties, Anderson's county seat was also strategically located on railroad lines and the area eventually became an industrial center.

By 1850 approximately 35% of Anderson County's population of over 21,000 inhabitants were slaves. It ranked 19th in terms of total value of farms, improvements, and implements. Major agricultural products included wheat (surpassed by only neighboring Laurens County), rye and oats (ranking third in state-wide production), and butter (ranking second). Cotton production was limited, with only 6670 bales of ginned cotton reported (ranking 22nd among South Carolina's counties). Anderson, however, ranked fifth in annual manufacturing production, with only Charleston, Edgefield, Laurens, and Richland counties producing more goods (DeBow 1854:304-307).

During the Civil War Anderson was a munitions manufacturing center. Only two minor skirmishes were fought in the County and it avoided Sherman's march to the sea through South Carolina (Work Projects Administration 1941:165).

In the postbellum Anderson County continued to develop a manufacturing base, with the city of Anderson eventually being surrounded by a series of nine textile mill villages. Agricultural production continued, and by 1910 Anderson county had approximately 92% of its land in farming with about 59% of that land improved. Anderson County reported 55,881 bales of cotton on 133,343 acres (approximately 30% of the total farm acreage) in 1910, production surpassed only by Marlboro and Orangeburg counties.

Close to 62% of Anderson's 8163 farms were under 50 acres, and only 0.2% were 500 or more acres in size in 1910 (Bureau of the Census 1913). By 1930 the proportion of farms under 50 acres had increased in 68% and those at or over 500 acres had decreased to about 0.1% of the total (Bureau of the Census 1932).

In spite of the large scale of tenant farming in Anderson County (see Orser 1988 for additional information), reference to the 1936 Highway Map for Anderson County (Figure 2) fails to identify any structures in the project area. The 1953 Corps of Engineers topographic maps prepared for the creation of Lake Hartwell indicate that the western portion of the project area was under cultivation, while the eastern area, presumably because of its steep slopes, was wooded (Figure 3).

The map also suggests that the portion of Six and Twenty Creek floodplain south of the S-29 bridge (now flooded by Lake Hartwell) may have had a high potential for deeply buried archaeological remains. The physiographic setting is similar to that described by Coe (1964:9-11) as narrows which tend to preserve early evidence of

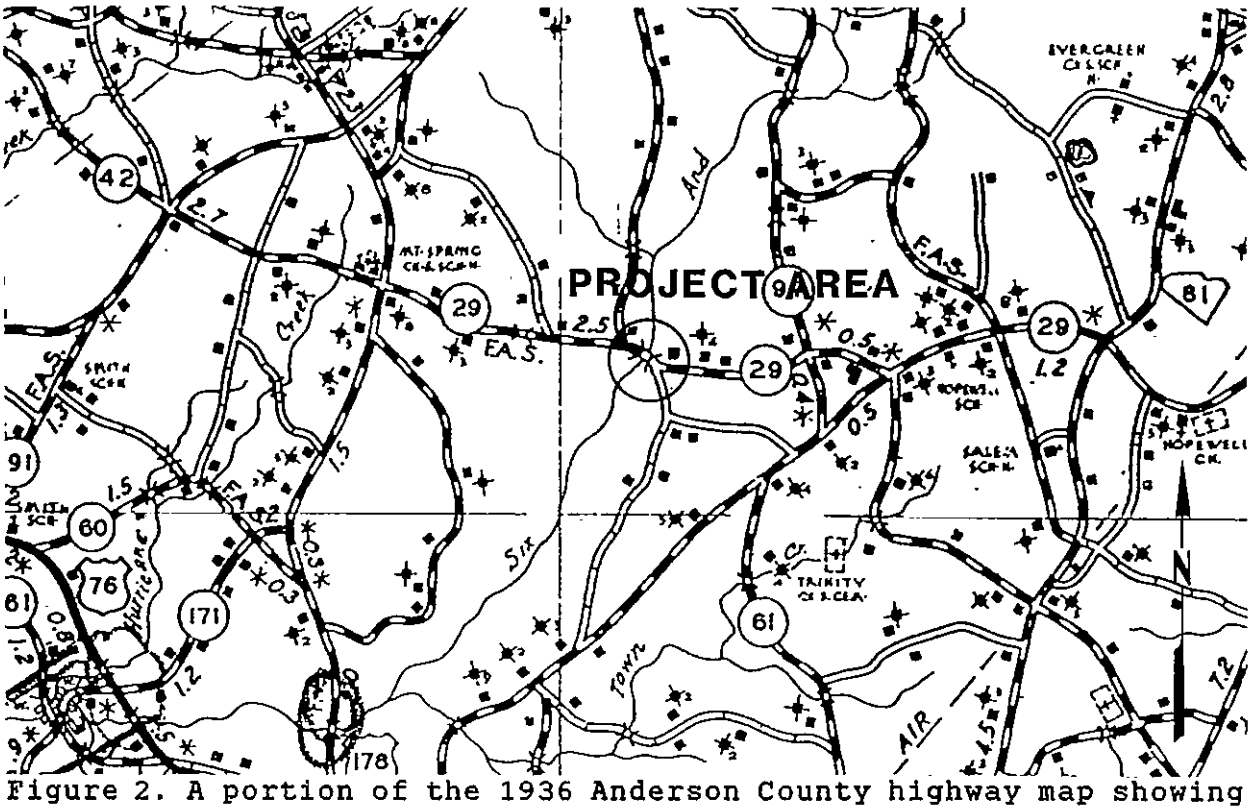


Figure 2. A portion of the 1936 Anderson County highway map showing the project area.

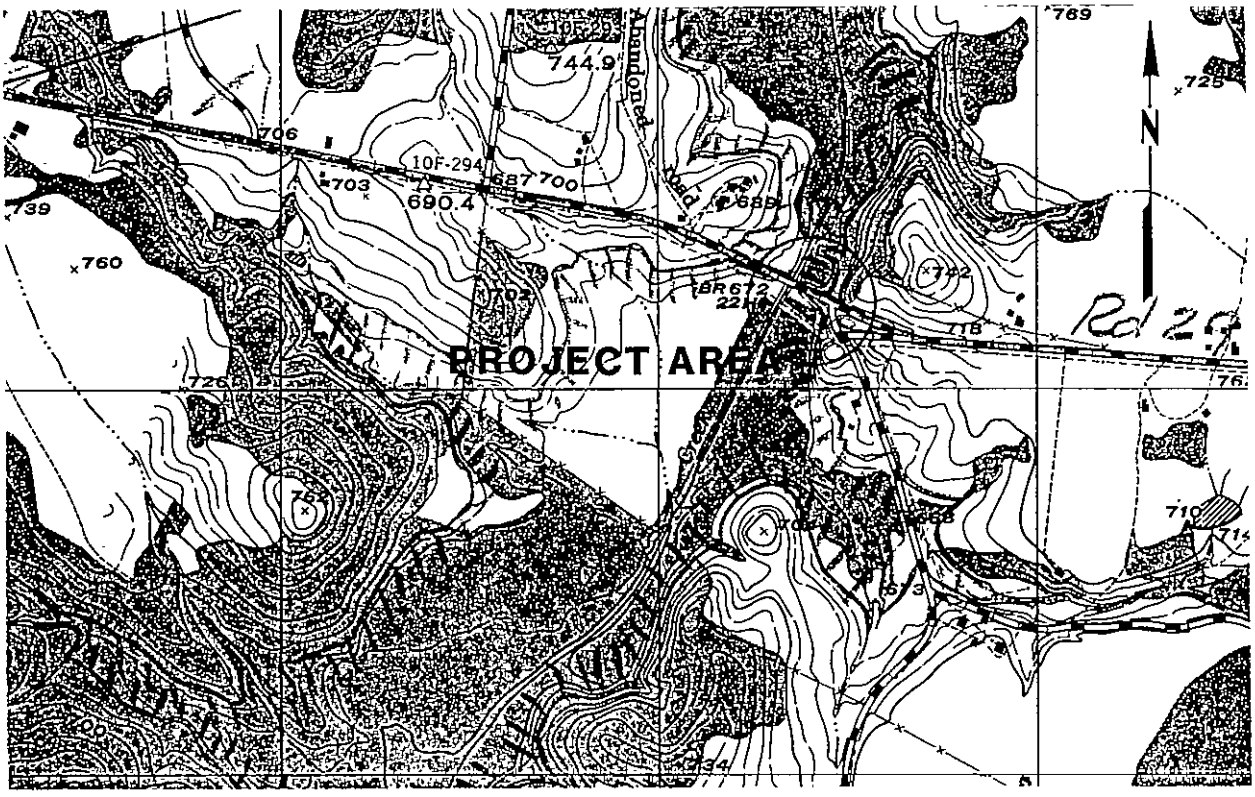


Figure 3. Portion of the 1953 Army Corps Lake Hartwell Basin map showing the project area.

Native American occupation.

Field Methods

This survey consisted of the excavation of 10 shovel tests, six on the east side of Lake Hartwell and four on the west. Placement of these tests, in both cases, was judgmental with an effort to provide coverage of the area expected to the impacted by the proposed project. Surface visibility, except as noted below, was absent in the project area.

Those on the east side were spaced about 25 feet apart and were placed on the ridge top immediately west of Little Creek Road. No effort was made to place tests in the area steeply sloping down to Lake Hartwell from this narrow ridge. On the west side of Lake Hartwell the four tests were placed along the proposed centerline of the project at intervals of approximately 20 feet. The area immediately adjacent to the lake was not tested because of the extensive erosion (Figure 4).

All shovel tests were 1 foot square and were excavated to a maximum depth of 1.0 foot. Fill from the tests was screened through 1/4-inch mesh and each shovel test was backfilled and flagged for future reference.

As previously discussed, the shovel testing program revealed evidence of extension erosion in the project area. On both sides of Lake Hartwell there are large quantities of decomposing rock in the upper 0.1 to 0.3 foot of newly forming A horizon soil.

In addition to these tests a surface survey was conducted along the ditch bank of Little Creek Road and in the erosional areas on the west side of the project. Surface visibility in these areas was excellent. The dirt road on the west side of the proposed project was also examined, but it was largely covered with gravel, limiting the inspection to relatively few erosional areas.

Results

No archaeological remains were identified from either the shovel tests or from the limited surface survey. A cursory examination of the immediate surroundings, outside the project corridor but possibly within a zone of very limited secondary impacts, also failed to identify any evidence of archaeological remains or historic properties (such as tenant houses or vernacular architecture).

Summary and Recommendations

The preliminary historical review and examination of the S.C. Institute of Archaeology and Anthropology site files revealed no sites known or recorded in the area of the proposed Duke Power

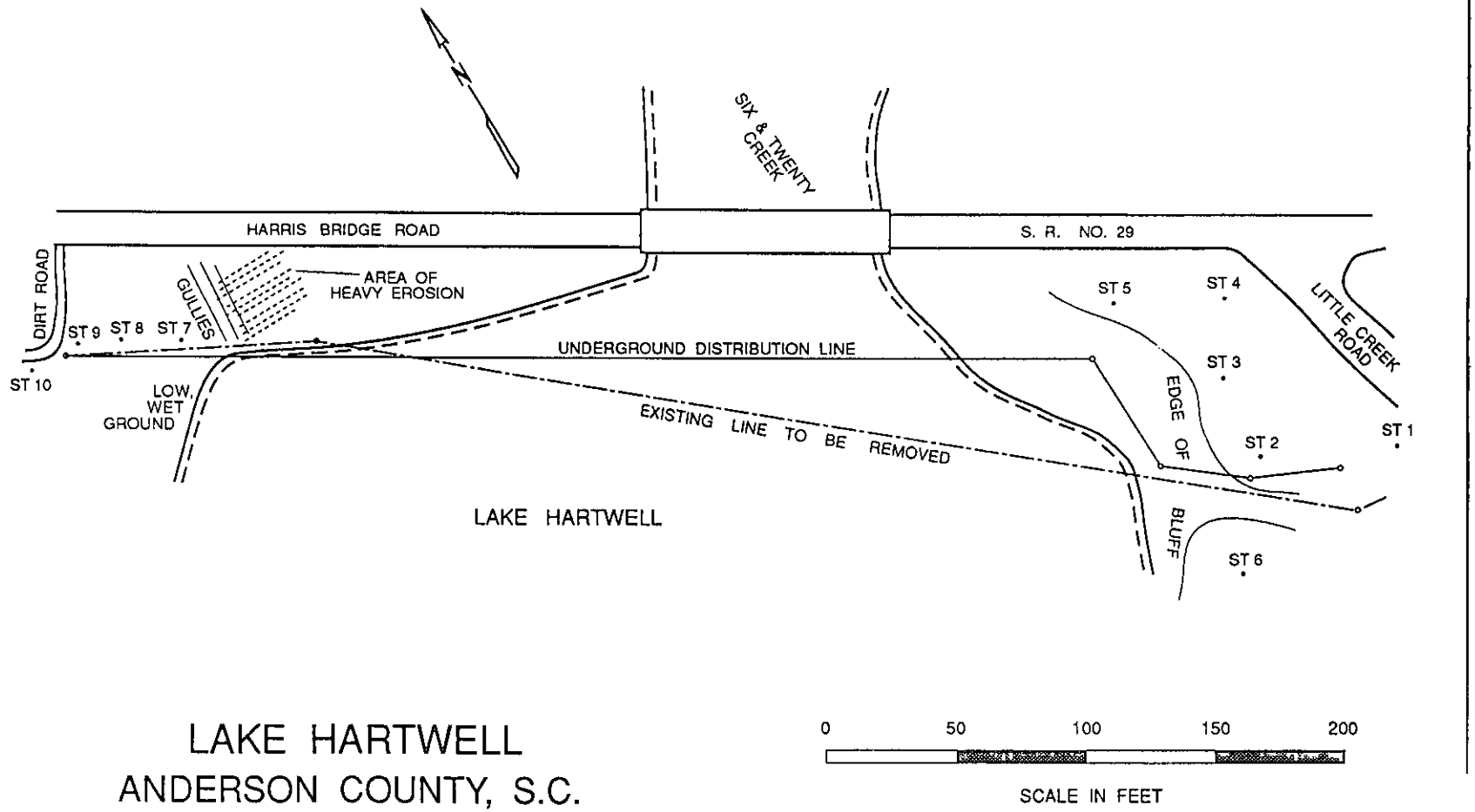


Figure 4. Proposed Duke Power subaqueous line survey area.

subaqueous line crossing Lake Hartwell south of S-29. This research, however, suggested that the project area would be characterized by heavy erosion.

The archaeological survey identified no archaeological or historical properties in the survey tracts as developed by Mar-Tec. The shovel tests and visual examination of the area did reveal considerable evidence of erosion, still active in some areas.

No further archaeological investigations are necessary and it is our opinion that the proposed project will affect no cultural resources in the project area.

Sources Cited

Anderson, David G. and J.W. Joseph
1988 Prehistory and History Along the Upper Savannah River: Technical Synthesis of Cultural Resource Investigations, Richard B. Russell Multiple Resource Area. National Park Service, Interagency Archaeological Services, Atlanta.

Braun, Lucy E.
1950 Deciduous Forests of Eastern North America. Hafner, New York.

Bureau of the Census
1913 Thirteenth Census of the United States, Abstract of the Census. Government Printing Office, Washington, D.C.

1932 Fifteenth Census of the United States, Agriculture. Vol. 2, Part 2: The Southern States. Government Printing Office, Washington, D.C.

Coe, Joffre
1964 The Formative Cultures of the Carolina Piedmont. Transactions of the American Philosophical Society 54(5).

Debow, J.D.B.
1854 Statistical View of the United States. A.O.P Nicholson, Washington, D.C.

Fenneman, N.M.
1938 Physiography of the Eastern United States. McGraw-Hill, New York.

Goodyear, Albert C., John H. House, and Neal W. Ackerly
1979 Laurens-Anderson: An Archaeological Study of the Inter-Riverine Piedmont. Anthropological Studies 4. South Carolina Institute of Archaeology and

Anthropology, University of South Carolina, Columbia.

Herren, Edward C.
1979 Soil Survey of Anderson County, South Carolina. U.S. Department of Agriculture, Soil Conservation Service, Washington, D.C.

Kelly, A.R. and R.S. Neitzel
1961 The Chauga Site in Oconee County, South Carolina. Series 3. Laboratory of Archaeology, University of Georgia, Athens.

Lowery, M.W.
1934 South Carolina Erosion Survey. U.S. Department of Agriculture, Soil Conservation Service, Washington, D.C.

Orser, Charles E.
1988 The Material Basis of the Postbellum Tenant Plantation: Historical Archaeology in the South Carolina Piedmont. The University of Georgia Press, Athens.

Royce, Charles C.
1975 The Cherokee Nation of Indians. Aldine, Chicago.

Trimble, Stanley W.
1974 Man-Induced Soil Erosion on the Southern Piedmont, 1700-1970. Soil Conservation Society of America, Ankey, Iowa.

Trinkley, Michael
1990 An Archaeological Context for the South Carolina Woodland Period. Research Series 22. Chicora Foundation, Inc., Columbia.

Wallace, David D.
1951 South Carolina: A Short History. University of South Carolina Press, Columbia.

Work Projects Administration
1988 South Carolina: The WPA Guide to the Palmetto State. Reprinted. University of South Carolina Press, Columbia. Originally published 1941, Oxford University Press, New York.